DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
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DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued For: A.M.Welles, Inc.
PO Box 2808
Norris, MT 59745

Permit Number: 3804-00

Preliminary Determination Issued: 04/20/06
Department Decision Issued:
Permit Final:

1. *Legal Description of Site*: A.M.Welles submitted an application to operate a portable aggregate crushing/screening plant in Sections 17 and 18, Township 1 South, Range 5 East, in Gallatin County, Montana in the town of Belgrade.Montana. Permit #3804-00 would apply while operating at any location in Montana, except within those areas having a Department-approved permitting program, those areas considered tribal lands, or those areas in or within 10 km of PM_{10} nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.* An addendum to this air quality permit would be required for locations in or within 10 km of PM_{10} nonattainment areas.

2. *Description of Project*: The permit applicant proposes the construction and operation of a portable aggregate crushing/screening facility consisting of a Jaw Crusher and screen (400 tons per hour (TPH)), two cone crushers with screens (200 TPH each), an 850 kilowatt (kW) diesel generator, and associated equipment.

3. *Objectives of Project*: The object of the project would be to produce business and revenue for the company through the sale and use of aggregate. The issuance of Permit #3804-00 would allow A.M.Welles to operate the permitted equipment at various locations throughout Montana, including the proposed initial site location.

4. *Additional Project Site Information*: In many cases, this crushing/screening operation may move to a general site location or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, additional information for the site would be found in the Mined Land Reclamation Permit for that specific site.

5. *Alternatives Considered*: In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the Montana Air Quality permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because A.M.Welles demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

6. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #3804-00.

7. *Regulatory Effects on Private Property Rights*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.

8. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no action alternative" was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			X			yes
B.	Water Quality, Quantity, and Distribution			X			yes
C.	Geology and Soil Quality, Stability, and Moisture			X			yes
D.	Vegetation Cover, Quantity, and Quality			X			yes
E.	Aesthetics			X			yes
F.	Air Quality			X			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resource			X			yes
H.	Demands on Environmental Resource of Water, Air, and Energy			X			yes
I	Historical and Archaeological Sites				X		yes
J.	Cumulative and Secondary Impacts			X			yes

Summary of Comments on Potential Physical and Biological Effects: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the crushing/screening operations. Impacts on terrestrials and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor, as the crushing/screening operations would be considered a minor source of emissions and would have intermittent and seasonal operations. Furthermore, the air emissions would have only minor effects on terrestrial and aquatic life because facility emissions would have good pollutant dispersion in the area of operations (see Section 8.F). Finally, the pit is existing and A.M.Welles is not planning to expand the footprint. Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed crushing/screening operation.

B. Water Quality, Quantity, and Distribution

Water would be required for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, pollutant deposition and water use would only cause minor, if any, impacts to water resources in these areas because the facility is small and only a small volume of water would be required to be used (as described in Section 8.F of this EA).

C. Geology and Soil Quality, Stability, and Moisture

The crushing/screening operations would have only minor impacts on geology and soil quality, stability, and moisture of soils. Only minor impacts from deposition of air pollutants on soils would result (as described in Section 8.F of this EA) and only minor amounts of water would be used for pollution control, and would be used, only as necessary, in controlling particulate emissions. Thus, only minimal water runoff would occur (as described in Section 8.B of this EA). Since only minor amounts of pollution would be generated and corresponding emissions would be widely dispersed before settling upon vegetation and surrounding soils (as described in Section 8.D of this EA), impacts would be minor. Finally, the pit is existing and A.M.Welles is not planning to expand the footprint. Therefore, any effects upon geology and soil quality, stability, and moisture from air pollutant emissions from equipment operations would be minor and short-lived.

D. Vegetation Cover, Quantity, and Quality

Minor impacts would occur on vegetative cover, quality, and quantity because the facility would operate in an area where vegetation has been previously disturbed. The pit is existing and A.M.Welles is not planning to expand the footprint, and the facility would be a small industrial operation. The facility would be a relatively minor source of emissions and the pollutants would be greatly dispersed (as described in Section 8.F of this EA); therefore, deposition on vegetation from the proposed project would be minor. Also, because the water usage would be minimal (as described in Section 8.B of this EA) and the associated soil disturbance from the application of water and water runoff would be minimal (as described in Section 8.C of this EA), corresponding vegetative impacts would be minor. Overall, impacts to vegetation cover, quality, and quantity would be minor.

E. Aesthetics

The crushing/screening operation would be visible and would create additional noise while operating at the proposed site. However, Permit #3804-00 would include conditions to control emissions, including visible emissions, from the operation. The crushing/screening operation would be portable, would operate on an intermittent and seasonal basis, and would be a small industrial source located at an existing pit area. Therefore, any visual aesthetic impacts would be short-lived and minor.

F. Air Quality

Air quality impacts from the proposed project would be minor because the facility would be relatively small and operate on an intermittent and temporary basis. Permit #3804-00 would include conditions limiting the facility's opacity and the facility's crushing/screening production. Permit #3804-00 would also require water and water spray bars be available on site and used to ensure compliance with opacity standards. Permit #3804-00 would also limit total emissions from the crushing/screening facility and any additional A.M.Welles equipment operated at the site to 250 tons/year or less, excluding fugitive emissions.

Further, the Department determined that the crushing/screening facility would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's PTE was below the major source threshold level of 100 tons per year for any regulated pollutant. Pollutant deposition from the facility would be minimal because the pollutants emitted would be well controlled, widely dispersed (from factors such as wind speed and wind direction), and would have minimal deposition on the surrounding area. Therefore, air quality impacts from operating the crushing/screening equipment in this area would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the initial proposed area of operation (Sections 17 and 18, Township 1 South, Range 5 East, in Gallatin County, Montana in the town of Belgrade), contacted the Montana Natural Heritage Program (MNHP). Search results concluded there are four known species of concern within the area. The search area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. The four species of concern are the Dwarf Purple Monkeyflower; A Stonefly; Small Dropseed; and Slender Wedgegrass.

While the four species may be found within a mile from the defined area, the project is not expected to have any significant effect on them. Specific effects of operating the crushing/screening operation in this area would be minor since the area is already disturbed, and would have only temporary operations in the area. Pollution controls would be required by this permit to ensure that emissions from the crushing/screening operation would be minimal. The Department determined that any effects upon the four species of concern would be minor and short-lived.

H. Demands on Environmental Resources of Water, Air, and Energy

The crushing/screening operation would only require small quantities of water, air, and energy for proper operation. Only small quantities of water would be required for dust suppression of emissions being generated at the site. In addition, impacts to air resources would be minor because the source is a minor industrial source of emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed as described in Section 8.F of this EA. Energy requirements would also be relatively small, as the facility would be powered by one industrial diesel generator engine. Overall, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area proposed for initial operations. According to the Montana State Historic Preservation Office, there would be a low likelihood of adverse disturbance to any known archaeological or historic site. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed crushing/screening plant.

J. Cumulative and Secondary Impacts

The crushing/screening operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate relatively small amounts of emissions of PM, PM_{10}, NO_x, carbon monoxide (CO), volatile organic compounds (VOC) (including HAPs), and oxides of Sulfur (SO_x). Emissions and noise generated from the equipment would, at most, result in only minor impacts to the area of operations because the crushing/screening plant would be relatively small, seasonal, and temporary. The initial proposed project would be short-term in nature, and have minor cumulative effects upon resource within the area. This facility, in combination with other emissions from A.M.Welles's equipment operations would not be permitted to exceed 250 tons per year of non-fugitive emissions. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would be minor.

9. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no action alternative" was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Social Structures and Mores				X		yes
B.	Cultural Uniqueness and Diversity				X		yes
C.	Local and State Tax Base and Tax Revenue			X			yes
D	Agricultural or Industrial Production			X			yes
E.	Human Health			X			yes
F.	Access to and Quality of Recreational and Wilderness Activities			X			yes
G	Quantity and Distribution of Employment			X			yes
H.	Distribution of Population				X		yes
I.	Demands for Government Services			X			yes
J.	Industrial and Commercial Activity			X			yes
K.	Locally Adopted Environmental Plans and Goals			X			yes
L.	Cumulative and Secondary Impacts			X			yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The crushing/screening operation would not cause any disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions, and would only have temporary and intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in Permit #3804-00, which would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the proposed crushing/screening operation because the facility would be a portable source, with seasonal and intermittent operations. The project site is located on private land that is already used as a gravel pit; therefore, the surrounding area would not change as a result of this crushing/screening operation. Therefore, the cultural uniqueness and diversity of the area would not be affected.

C. Local and State Tax Base and Tax Revenue

The crushing/screening operations would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a minor industrial source of emissions and would have seasonal and intermittent operations. The facility may require an additional 2-3 employees. Only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue would be minor because the source would be portable and the money generated for taxes would be widespread. Therefore, any impacts to the local and state tax base and tax revenue would be minor.

D. Agricultural or Industrial Production

The crushing/screening operations would have only a minor impact on local industrial production since the facility would be a minor source of aggregate production and air emissions. Also, the facility would locate on private land located between the interstate and railroad tracks, on 30 acres of an existing commercial pit. Because minimal deposition of air pollutants would occur on the surrounding land (as described in Section 8.F of this EA), only minor and temporary effects on the surrounding vegetation (i.e. agricultural production) would occur. In addition, the facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation, as described in Section 8.D of this EA. Overall, the impacts to agricultural or industrial production from this facility would be minor.

E. Human Health

Permit #3804-00 would incorporate conditions to ensure that the crushing/screening facility would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 8.F. of this EA, the air emissions from this facility would be minimized by the use of water spray and other process limits that would be required by Permit #3804-00. Also, the facility would be operating on a temporary basis and pollutants would disperse from the ventilation of emissions at this site (see Section 8.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed crushing/screening facility.

F. Access to and Quality of Recreational and Wilderness Activities

The site is situated in an area bounded by the highway and railroad, and another commercial pit. There are no known access routes to recreational or wilderness activities near the site. Noise from the facility would be minimal because the facility would be small. Also, the facility would operate on a seasonal and intermittent basis on private land and would be a relatively minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site would be expected to be minor and intermittent.

G. Quantity and Distribution of Employment

The portable crushing/screening operation would be relatively small, would have seasonal and intermittent operations, and would require 4 to 9 employees to operate, 2 to 3 more than presently employed at this site. Therefore, only a minor effect upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The portable crushing/screening operation would be small and would require 4 to 9 employees to operate, 2 to 3 more than presently employed at this site. No individuals would be expected to permanently relocate to this area of operation as a result of operating the crushing/screening facility. Therefore, the crushing/screening facility would not impact the normal population distribution in the initial area of operation or any future operating site.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the crushing/screening operation is in progress. In addition, government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be minor, due to the relatively small size and seasonal nature of the crushing/screening facility.

J. Industrial and Commercial Activity

The crushing/screening operation would represent only a minor increase in the industrial activity in the proposed area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation. Therefore, any impacts to the industrial and commercial activity would be minor.

K. Locally Adopted Environmental Plans and Goals

A.M.Welles would be allowed, by Permit #3804-00, to operate in areas designated by EPA as attainment or unclassified for ambient air quality. An Addendum would be required to operate in or within 10 km of a PM_{10} nonattainment area. Permit #3804-00 would contain production and opacity limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards, as a locally adopted environmental plan or goal for operating at this proposed site. Because the facility would be a small and portable source and would have intermittent and seasonal operations, any impacts from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The crushing/screening operations would only cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would be a portable and temporary source. Further, no other industrial operations are expected to result from the permitting of this facility. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Further, this facility may be operated in conjunction with other equipment owned and operated by A.M.Welles, but any cumulative impacts upon the social and economic aspects of the human environment would be minor and short-lived. Thus, only minor and temporary cumulative effects would result to the local economy.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Department of Environmental Quality - Permitting and Compliance Division (Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Montana Department of Environmental Quality (Air Resources Management Bureau, Montana State Historic Preservation Office (Montana Historical Society), and Montana Natural Heritage Program.

EA prepared by: Christine Weaver
Date: March 13, 2006